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A Day in Bed.

See page 358.

HEALTH

A WEEKLY JOURNAL OF

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

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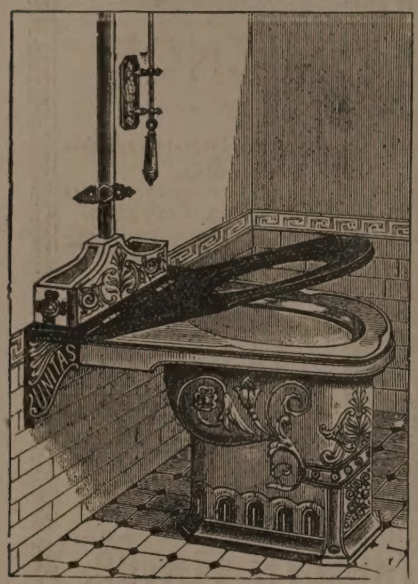

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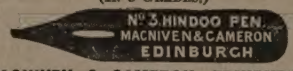

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HEALTH

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, MARCH* 7, 1890.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

SPEAKING of the inconvenience of sweat-bands in hats, a writer says that these bands may contain even 28 per cent. of fatty acids, which in summer may penetrate into the forehead and cause inflammation, and corrode deeply into the skin. They should be rubbed with burnt magnesia every little while, so as to leave a small film on the band; and this substance should then be wiped off with a cloth before applying again.

PROFESSOR J. FORSTER, of Amsterdam, has published an account of some investigations made in his laboratory by himself and De Freytag, having for their object the determination of the effect of the common process of salting or pickling meat on various forms of germs. It was found that cholera germs were soon destroyed under the influence of abundance of salt, usually in a few hours; but that typhoid germs, those of erysipelas, and those of pigs' infectious diseases, frequently retained their vitality for several weeks, or even months, in spite of the presence of abundance of salt. The same was also true of the germs of tubercle. In some cases these bacilli were found alive after being two months in pickle, their vitality being proved by their capacity for infecting new cultures.

PORTIONS of the organs of a tuberculous animal, preserved for a considerable time in salt, were found capable of causing tuberculosis in a healthy animal when introduced into its abdomen. Experiments on the spleen of an animal which had died of malignant splenic fever showed that salt possessed the power of destroying the germs of this disease in about eighteen hours. These, as well as cholera germs, were found to require seven and one-half per cent. of salt to destroy them. From these facts it would appear that salting or pickling has but little destructive effect on many of the more common forms of germs liable to be found in diseased meat.

PROFESSOR PERCY F. FRANKLAND and Mr. F. J. Hambly examined a small sample of the milk of a bottle-nosed whale. The milk presented a thick creamy appearance, globules of fat being clearly discernible in the mass, which was possessed of a strong fishy odour. Analysis showed that the milk consisted of total solids (dried at 101 degs.—105 degs. C.), 51·33 per cent.; water, 48·67 per cent.; non-fatty solids (insoluble in ether), 7·57 per cent.; fat (soluble in ether), 43·76 per cent.; and ash, 0·46 per cent. The milk was thus enormously rich in fat, and it also contained spermaceti.

I OBSERVE it has been reported that the gross increase in the national expenditure on drink for 1889, as compared with 1888, was £7,597,930, and was distributed as follows: On British spirits, £1,219,758; on foreign and colonial spirits, £521,732; on beer, £5,263,572; on wine, £592,868. The explanation given is that of the increased prosperity and purchasing power of the people. It will be noticed that the great increase is in the consumption of beer. We regret this increase, says the *Lancet*, and have no apologies to offer for it. It is an error of intelligence that will lead to errors of health which only medical men will know of. The amount consumed by the people of England, Scotland, and Ireland was already so much in excess of all possible physiological want, and taken in such disregard of medical opinion, that the addition of seven millions' worth more is a serious matter, none the less so that the amount taken is consumed by a diminishing number of persons. The great desideratum to be arrived at is the reduction of casual drinking at odd times, and on empty stomachs. This infallibly leads to disease and disaster.

A MEDICAL man, writing to a contemporary on the subject of that annoying skin-affection "barber's itch," says that "the source of the infection is in some part of the apparatus used in the operation of shaving is certain, and I think the shaving-brush is probably the vehicle. This is never thoroughly cleansed, nor submitted to the germicide action of boiling water like the razor, but each sitter is in his turn lathered with a common brush from the common soap-bowl, never at a greater temperature than that of lukewarm water. It would not be difficult or expensive to dip the brush as well as the razor in boiling water between each operation, and suitable precaution might be taken with regard to the soap without any great extra expense. Precautions of this kind are, I believe, insisted upon in some parts of Europe, and should either by precept or law be enforced in this country. Considering how often the skin is abraided, or a pimple chapped, and made to bleed in the operation of shaving, it is probable that other diseases of a more serious nature than sycosis (or barber's itch) may be conveyed in the same way, and the source entirely unsuspected."

SPEAKING of disinfectants, I note that Dr. Spottiswoode Cameron, Medical Officer of Health for Leeds, lately discussed the ordinary methods of using disinfectants for the sick-room, soiled clothes, &c., and warmly urges that active methods, which he describes, should be adopted and enforced. He objects to the use of concentrated disinfectants and soaps, recommending especially the use of a 5 per cent. solution of carbolic acid for many purposes, such as decomposition of typhoid stools; or of

perchloride of mercury, 1 part in 1,000, for disinfecting houses. Dr. Cameron considers that the use of small quantities of strong carbolic subsequently diluted has many disadvantages, while carbolic soaps are volatile and uncertain in their action. It might be added that the common practice of exposing disinfectants in saucers about a house is simply a piece of sanitary foolishness, and one which has no justification whatever.

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M. Leudet has occupied himself with collecting some statistics on the question of whether a wife can give consumption to her husband, or a husband to his wife. He has taken 112 widows or widowers whose husbands or wives respectively have died in undoubted phthisis. Out of these seven were consumptive; but several of them had facts in their previous history, before marriage, showing a tendency to the disease. His inference was, therefore, that the transmission of consumption in married life must be very rare; even more rare in the upper classes than in the middle and lower. In eighty out of these 112 cases there was a family history which he could follow; and twenty-seven of these showed some members who were phthisical. Unfortunately, British experience does not confirm M. Leudet's opinions. No doubt, I think, can be entertained that, under ordinary circumstances, the disease can be transmitted from the sick to the healthy in cases where there is close association with consumptive patients.

✪ ✪ ✪

Mr. Felix Weiss, in his presidential address at the Odontological Society, made some remarks on heredity in teeth, which his long experience and careful record of cases render valuable. It has been stated, says the account from which I quote, that girls generally take after their fathers, and boys after their mothers in the character of their teeth; but this surmise has not been borne out in Mr. Weiss's practice, though at the same time he is convinced that the teeth of children do resemble those of one or other parent. Numerous examples were brought forward showing these hereditary peculiarities. Thus, with regard to *shape*, a father had an extra cusp—or spur it may be called—upon the tongue-side of the upper molars; and of six children, four had the same; and the two youngest, who had not yet cut their permanent molars, had a similar spur on their milk-molars.

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Peg-shaped upper lateral incisors, or front teeth, in mother and daughter, and overhung and underhung jaws transmitted from parent to child, are frequently seen. Turning to the hereditary transmission of caries, there are great difficulties in arriving at any satisfactory conclusions, for, to prove that it is hereditary it should be detected in parent and child at about the same period of life; and although cases are frequently met with where members of the same family lose the corresponding teeth, great caution should be exercised in ascribing what may be mere coincidence to heredity. The transversely grooved and honeycombed teeth, which are usually considered due to attacks of illness at that period of life when the teeth are in a state of formation, are, Mr. Weiss believes, in many instances distinctly hereditary, as no history of illness can be found. The wisdom teeth—the most variable of all teeth in shape, size, and general characters—are often observed to resemble those of a parent or ancestor.

Original Essays

"Life is not to live, but to be well."—*Martial.*

A DAY IN BED.

By Dr. Andrew Wilson.

So far as I am aware, the poets have never devoted much of their time or talents to the laudation either of "a day in bed" (an unpoetic topic, no doubt, at best) or of the virtues and excellences of "a long lie" in the morning. Contrariwise, it is easy to think of early rising and activity in the small hours of the morning as a creditable and most excellent practice, judged both from the poetic and the practical and every-day point of view.

John G. Saxe, in his poem on "Early Rising," however, indites some extremely sensible observations concerning the advantages of allowing the day to be well advanced before we arouse from our slumbers. His poem is not by any manner or means an advocacy of sloth; it is rather a justification of the wisdom of resting well and resting fully.

"'God bless the man who first invented sleep!'
So Sancho Panza said, and so say I.
And bless him also that he did not keep
His great discovery to himself, nor try
To make it, as the lucky fellow might—
A close monopoly by patent right!

* * * *

But blast the man with curses loud and deep,
Whate'er the rascal's rank, or age, or station;
Who first invented, and went round advising
That artificial cut-off—early rising!"

Saxe begins his poem thus, and then proceeds to explain the advantages of a full meed of repose:—

"The time for honest folks to be in bed
Is in the morning—if I reason right;
And he who cannot keep his precious head
Upon his pillow till it's fairly light,
And so enjoy his forty morning winks,
Is up to knavery—or else—he drinks."

In equally ingenious strain, our poet argues for the "long lie" in bed. He hates early rising, and will have none of it. He pours his satire on those who say, "Rise with the lark, and with the lark to bed." "Early to bed and early to rise, makes a man healthy, wealthy, and wise," he would scorn as a pleasant practical rule of life. Early to bed, you may go, is his tacit argument; but the early rising is on the whole for most folks a mistake. This is the poet's philosophy, and this is the gist of his advice to the listening world.

There is no denying that Saxe will have many advocates and adherents in respect of his views regarding the generally wearisome nature of the practice of early rising. But it is evident the justice of opinion depends on circumstances here, as elsewhere; and personal sympathy may be lavished erroneously on a practice which, according to many excellent minds, is the essence of sluggardliness and sloth. Due rest in bed is, of course, a necessity for health. Life is a burning of the candle at both ends in one sense, in that even during our hours of sleep the vital machinery—heart, lungs, brain, &c.—does not cease from its work. Just as we have to expend energy or force in the very act of repairing our bodies by the intaking and digestion of food, so in the hours of sleep the bodily wear and tear is still represented in the incessant work of our frames. Sound, healthful sleep, and plenty of it, is an essential for health. The "Eight Hours' Bill," which certain politicians are eagerly discussing as I write, might, with advantage, be applied

physiologically to the requirements of the body in sleep. A few of us may do, while many of us have to do, with less repose. Personal habits may influence sleep, its amount, its depth, and its effects upon us, just as the relativity of things is seen in our foods, our drinks, and all else that pertains to us as individuals. But I apprehend it is a very fair general conclusion that which holds that for an adult eight hours' sleep is a just, adequate, and sensible amount of repose, and is such as—when passed amid pure air especially—is certain to renew and invigorate the body perfectly and properly.

For the young, as for the old, there is, of course, an increase of the amount of sleep demanded by nature. The infant passes the early months of its life in sleep. This latent period, when almost all is bodily gain and when there is little physical loss, lays the foundation of the body's nutrition. Life gets a good start, in other words, in the sleep of infancy. In old age, when the body's powers are rapidly failing in intensity, the period of sleep is also prolonged. Here nature makes up in sleep what is wanted in nutrition. "Sleep is food" at the two extremes of life: it aids the building of the body in the young, and it saves the wear and tear of the frame in the old.

Doubtless it is true that on the "early to bed" principle, early rising is naturally facilitated. One may, however, be excused for making the remark that the benefits of early rising are by no means either universal in operation nor continuous in point of practice. To "rise with the lark" is poetically commendable; but when the practice has to be carried out and illustrated on a cold, dark winter's morning, the subject may perchance be excused if the natural man within him strongly suggests a preference for a continuance of the warmth and comfort of the couch. The summer morning, with its brilliant sunrise, on the contrary, tempts one from bed for an early walk or a cycle run before breakfast; so that the pleasure of early rising is clearly a matter of times and seasons, and not one which (so far as I can see) our tastes, however varied, must invariably and always commend. Early rising may be a positive evil if it requires to be undertaken and practised by a person who has perforce to remain late out of bed. They were wise who first postulated "early to bed" as the necessary preliminary for the early rising part of the axiom. A man who goes late to bed, it stands to reason, should be late in rising. We can never err very far, or seriously, if we lean to the side of fair indulgence in sleep, and lay down for adults a minimum of eight hours as an amount of repose consistent with the wants and requirements of ordinary people.

These remarks, pertaining to the ordinary practice of adult mankind, may serve to preface certain suggestions concerning a somewhat novel and unusual departure from our ordinary sleeping habits. We are naturally given to contemn and despise the idea of remaining in bed when our health is good and all our vital forces are in fair and full working order. Apart from the matter of ordinary sleep, we never, as a rule, think of "a day in bed," either as preservative of health or as conducive to longevity. Yet I am convinced there is a great deal to be said in favour of "a day in bed" occasionally, as an aid to health in the middle-aged, and assuredly as a measure tending to prolong life in the old.

I forget where the incident occurred, or wherein it is related, but the statement was made once upon a time, by a very old lady who had reached her ninetieth year, and who was then well and hearty, that she owed her vitality to her habit of spending at least two days of each week in bed. Now, whether this assertion be doubted or not as to its good effects upon the venerable dame, I can conceive of nothing so conducive to her welfare as this practice of obtaining for body and mind a statutory period of perfect rest. In bed, the whole muscular system is at ease, and the wear and tear of the body is reduced to a minimum. The processes of excretion (that is, the getting rid of waste matters) are in abeyance; there is less waste to get rid of, and lungs, skin, and kidneys enjoy at least a measure of comparative repose. The nervous system, above all, is soothed and comforted by the "day in bed." Anxieties and worries disappear after the rest, and the individual returns to the work-a-day world refreshed and renovated, physically and mentally, in a degree such as the action of no tonics or other drugs could have accomplished. In a word, the person who enjoys "a day in bed" is in the position of an engine whose fires are damped down, and whose energies are recruiting (as the history of even mechanical things illustrates) for the renewal of the work of to-morrow.

There need be little hesitation, then, in saying that, for old persons, "a day in bed" is a health-measure of vast importance. If the aged person is wise, he (or she) will make it a regular practice to spend a couple of days per week in the repose which a sojourn in bed alone can give. Rest in a chair or on a sofa will not suffice. These procedures are too nearly akin to the every-day and waking practice to be of any service. Countless temptations to exertion await the person who is out of bed; while conversely, while he is in bed, the idea of work or of labour and movement is essentially abolished. Such repose is absolute; and if rest be a great medicine, as James Hinton long ago contended, and as daily experience teaches, then, for old folks, "a day in bed" (as a regular and not merely occasional practice) is to be regarded as simply invaluable beyond all comprehension.

I shall go further in my advocacy of "a day in bed" as a health-measure. I happen to know the case of a busy man whose life is one long period of physical and mental activity, and who has found, of late years, that no measure possesses anything like the recuperative effects which follow a day's rest in bed. Even in his holiday-season this person is given to taking an occasional *siesta* in his bedroom. Provided with light literature, he enjoys his repose as another man delights in an outing, and his mental and physical energy is recruited in an easy and satisfactory manner by the adoption of this practice. Hence, not for the old alone, but for those in middle life, "a day in bed" is to be recommended as a measure worth trying in the light of physiological experience of its value.

It will be seen that in this view of things one may go much further than John G. Saxe, who despises and condemns the practice of early rising. Possibly a new generation of poets may be found to extol the value of repose as an aid to health. Poets are beginning to show a more practical spirit nowadays than of yore. But whether æstheticism be found upon my side or not, I affirm, without fear of contradiction, that, when occasion offers and business allows, there is no measure which will repair the body and recruit the mind of the middle-aged more readily or more thoroughly than the simple expedient of remaining "a day in bed."

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Lecturer on Chemistry in the Edinburgh Medical School.

NINTH PAPER.

A GLASS OF MILK *(continued)*.

Taking our diet table as a basis, let us now see how we can best fill in a day's diet with the food substances at command. The following table will show how this may be accomplished:—

	ozs.		ozs.
Bread	13	Cabbage	6
Butter	1	Cheese...	3½
Milk	4	Sugar	1
Bacon	2	Salt	0¾
Potatoes	8	Water...	66¼

As regards the water, this may be consumed either plain, or contained in soup, beer, wine, tea, coffee, &c.

If we leave any article out of the list or consume a smaller portion of any of the food substances named there, the amount has to be made up by taking a larger amount of some other or similar material.

If an analysis be made of the tables, it will be found that a certain ratio is kept up between the amount of the different classes of food required; and this ratio may be expressed in the following numbers:—

Water	25
Nitrogenous foods	1¼
Non-Nitrogenous foods	5½
Mineral matters	0¼

The nitrogenous substances are more abundant in animal food. Albumen, which forms about 12 per cent. of the white part of an egg, may be taken as a typical nitrogenous food, and it exists in varying amount in all animal tissues. The action of heat upon it is well known; it causes it to solidify or coagulate and become insoluble, and of course less digestible. Fibrin, another form of albumen, also occurs in animal tissues, in the lean part of meat and in the blood. Plants likewise contain albuminous bodies. Peas, beans, lentils, and all similar vegetable bodies, contain an albuminoid termed legumin, very similar in composition and properties to the casein or cheesy portion of milk. Bones contain a number of nitrogenous substances, which are extracted by warm water, and cause soup to gelatinize on cooling. To these the names gelatin and chondrin have been given. As regards non-nitrogenous foods, starch is the commonest and most abundant. Flour, sago, arrowroot are mostly made up of starch, whilst corn-flour is almost pure starch. Sugar, again, is contained in most vegetable substances, and is a non-nitrogenous food. Oils and fats may be also included in our list. They contain no nitrogen, but are more active in maintaining animal heat than the starches and sugars.

Let us now glance at the chemical changes involved in the digestion of these foods. When food is taken into the mouth it is broken up mechanically by the teeth in the process of chewing, and it becomes mixed up with the saliva, which is poured out from the glands that secrete it. Saliva contains an active principle called ptyalin, which, in acting on the starch, converts it firstly into dextrin, a body having the same composition as starch, but differing from it in several particulars, an important one being that it is soluble in water. The dextrin so formed is rapidly converted into sugar—not the cane sugar, but a variety known as grape sugar, or glucose. After being chewed, the food with saliva passes into the stomach, when it is acted on by the gastric juice, which is a fluid secreted by the glands of the stomach. Gastric juice is an acid liquid containing free hydrochloric acid and pepsin, along with a number of other substances. The pepsin is a most important substance, and acts specially on the nitrogenous parts of the food.

On starch, sugar, and fat, gastric juice has no action; in fact, as far as starches are concerned, the action of the saliva is impeded and stopped by the gastric juice; but if the stomach contains mucus, as it usually does, gastric juice then has the power to convert ordinary cane sugar into the glucose variety. It is on the albuminous bodies, however, that gastric juice exerts its chief action. The name pepsin has been given to the active ingredient of gastric juice, and it is now extracted from the stomach of the pig, and used in medicine to supply the deficiency which some dyspeptics suffer from. Gastric juice converts the albuminoids into soluble nitrogenous bodies termed *peptones*, in which form they are absorbed, along with any converted starchy matters, by the delicate vessels of the stomach.

The food, or *chyme*, as it is now termed, passes next into the intestines, in the first portion of which it is brought in contact with the bile and pancreatic juice; the former being secreted by the liver, the latter by the sweetbread, or pancreas. The pancreatic juice acts, again, on starchy matters which have escaped the action of the saliva, and the remaining starch is speedily converted into soluble sugar; fats and oily matters are emulsified by the pancreatic juice, and this latter action is aided in some degree by the bile, while the pancreatic juice is also capable of digesting nitrogenous matters, and thus imitates the gastric juice of the stomach. The digested food is now called chyle, and is forced along the intestines, which gradually absorb the valuable constituents, rejecting the useless ones, which are ultimately cast off from the body. This is a mere outline of the processes involved; but it is sufficient in the meantime to enable us to understand the chemistry of the foods we are to consider, and it will also make clearer some of the processes involved in cooking food.

Let us now return to our glass of milk, which has been standing so long that the cream, if it contains any, will have risen to the top, forming a rich fatty layer, which shows us that milk contains fat. I have spoken of milk as containing all the needful food ingredients, and in correct ratio, forming, as it were, a perfect food. Let us now glance at an analysis of milk and see if we can learn anything about its exact nature.

Average Composition of Cow's Milk.

Water	86·3
Casein, or Cheesy matters	4·1
Fat, or Butter	3·7
Milk Sugar	5·1
Mineral matter	·8

The above analysis shows the average composition of the milk from a number of cows. Whilst the composition is fairly constant, cases do arise in individual cows where, either from ill-health or from improper feeding, the total solid matter may fall below the 13 per cent. shown in the analysis. Of course the milkman often decreases them by adding a little more water than the cow naturally secretes in her milk. Let us now consider each of the constituents of milk from a chemical and dietetic point of view.

The water simply acts as a vehicle or solvent for the other ingredients, so we may dismiss this first constituent.

Next comes the casein. This is the nitrogenous constituent, and a very valuable food it is. Essentially it is a peculiar form of albumen, and associated with it, is

always some albumen which resembles ordinary egg albumen. It is a great question if true casein is made up of a single substance; it is more probable a mixture, and a very complex mixture, of various nitrogenous matters. On boiling milk, the ordinary albuminous substances are coagulated like white of egg, whilst the casein is unchanged. The peculiar taste of boiled milk is very likely due to this coagulation.

Casein itself exists in two distinct forms, the soluble and the insoluble. In fresh milk it is in the soluble form, and as such it is readily digestible, and is easily absorbed by the stomach; but on the milk turning sour the casein is changed into the insoluble variety. It has long been known that acids curdled milk, or render the casein insoluble; and it was argued from this that the lactic acid produced during the souring of milk caused this change, and that the casein was kept in the soluble condition by the alkalinity of the milk. This theory, ingenious though it be, has of late years been much doubted, and it is thought by many that the change is one known to chemists as of "molecular" kind, a term (in many cases used as cloak for ignorance) used to indicate change in properties without any change in chemical composition. Whatever be the cause of the action in question, it is retarded by the addition of baking soda to the milk, which undoubtedly acts by preventing the formation of free lactic acid. After the casein has been precipitated, it can be dissolved again by any alkali, such as carbonate of soda. In this respect milk-casein differs from egg-albumen, whilst on the other hand it resembles, as far as this property goes, the legumin of beans and peas.

The fat is distributed through the milk in the form of minute globules. It is a mixture of several fatty substances, containing, amongst others, as a distinguishing feature, the fat of butyric acid. The presence of this substance serves to distinguish in a measure butter-fat from other fats foreign to butter, but frequently substituted for it.

An Engineers', Electricians', Builders', and Ironmongers Exhibition will be held in the Royal Agricultural Hall, London, from March 17th to 29th. Any one interested in these professions and trades will receive a ticket admitting to the Exhibition on sending a postcard to the Offices, 43, Oxford-street, W.C.

In Paris whenever a local shopkeeper advertises to sell "at cost," a Government official, detailed for the purpose, swoops down upon him, and makes a careful inspection in order to satisfy himself that the merchant carries out what he advertises. If the latter is detected in fraud, an adequate punishment is at once meted out to him. They don't deny a man's right to sell his goods at less than cost if he chooses, but he must not publish any lying advertisement.

Catarrh, Catarrhal Deafness, Hay Fever.—A new Home Treatment.—Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness, and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N.B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of 2½d. stamp to pay postage, by A. H. Dixon & Son, 337 and 339, West King-street, Toronto, Canada.—*Christian Advocate.*

Sufferers from catarrhal troubles should carefully read the above.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

SOME NEW POWERFUL ANTISEPTICS.

Eucalyptia, the true oil of *Eucalyptus globulus*, possesses the following advantages over carbolic acid:—1. It is non-poisonous and devoid of acrid and irritating properties. 2. It possesses a refreshing, pleasant odour. 3. It has a higher germ-killing power. A very small quantity of Eucalyptia arrests fermentation at all stages and prevents the development of the majority of bacteria. In the preventive treatment of infectious diseases it may be usefully employed by diffusing the vapour through the atmosphere; hence a small quantity volatilized by pouring it on a hot plate, vaporized from a Codman & Shurtliff's Steam Atomiser, or by sprinkling a few drops about a room, quickly volatilizes and purifies the atmosphere of an apartment.

It is frequently found that carbolic acid is especially obnoxious in the sick-chamber, as, for instance, in a case of diphtheria. The Eucalyptia may be sprinkled upon a cloth and suspended in the room; this will be found a more agreeable and wholesome means for purifying and sweetening the atmosphere. Dr. Wood says, "The vapour of carbolic acid seems to act very feebly as a disinfectant and germicide, and it is very evident that the popular estimate of the value of carbolic acid is too high" ("Manual of Therapeutics").

An excellent means for purifying the air is the Pinol-Eucalyptia Dry Inhaler. This consists practically of a glass-tube filled with an absorbent medium; upon this the antiseptic is dropped, and when the inhaler is held in the mouth, like a cigar, the air passes through the tube and carries with it a modicum of the antiseptic vapour. Moreover, Eucalyptia possesses other useful properties. It acts as a stimulating expectorant and promotes a healthy condition of the secretion. As an antipyretic it has a most decided specific action in cutting short an attack of malarial fever. It relieves flatulence and gastric irritation.

Pinol—the volatile oil distilled from the needles of the *Pinus pumilio*, found growing just below the line of perpetual snow on the Alps. This possesses more powerful ozonizing properties than any of the terebinthine (turpentine) oils. The odour of Pinol is pleasant and highly esteemed as an antiseptic for use in the sick-chamber; it purifies and freshens the atmosphere.

Pinol Perfume is an antiseptic eau de Cologne, containing a definite quantity of the pine oil. This perfume is excellent for spraying or sprinkling about the room, and its employment is decidedly more advantageous than the ordinary Cologne waters.

Salol.—This combines the germicidal and antiseptic properties of carbolic acid with salicylic acid. Numerous surgeons on the continent—notably amongst others are Drs. Grätzer and Demme—consider Salol to be a most effective substitute for iodoform. In several cases of burns and old ulcers which had previously resisted treatment with powdered iodoform, Grätzer employed this antiseptic as a dusting powder with marked success.

"The first triumphs of Salol were more in the treatment of *acute rheumatism*, excelling, as it apparently does, all other remedies in its power to abate pain and lessen fever. If all conditions be propitious, by the end of the second or third day, fever, joint-pain, and swelling will have disappeared."—*Bartholow.* Its control over pain is

marked, especially in "that large and determinate class called *rheumatic*, of which lumbago, sciatica, and neuralgia are representatives." The dose is one or two five-grain tabloids three or four times a day, given under medical direction.

"Salodent," a liquid dentifrice scientifically prepared from Salol and agreeably flavoured with aromatics, is the most recent of antiseptics. It may be usefully employed to stop and prevent caries of the teeth, and to act as an agreeable but powerful antiseptic in destroying the virulence of all poisonous effluvia. This new preparation imparts a most delightful and lasting odour to the breath, and will therefore come as a boon to smokers and to those who are troubled with disagreeable breath.

ON STAMMERING.

A correspondent writes as follows in *The Provincial Medical Journal*:—Having lately received several circulars from different professors who advertise their secret methods for the cure of stammering, I have thought that a personal experience might be of interest and value. I shall not attempt a learned physiological analysis of the nerve-centres and nerves involved in the different muscles, and sets of muscles, in stammering, but rather aim at a simple statement.

Since twenty years of age I have been, though not wholly, yet fairly free from the trouble. In my earliest remembrance of speech, and all through my boyhood, I was a terrible stammerer. I have only heard of two epileptics in my family: one a woman, a first cousin; the other a boy, a second cousin, both on the father's side.

The occasions on which I have stammered for thirty years past, and yet stammer, are about as follows:—From habit acquired in travel, and in India, and to save the legs of the maid, I prefer to go out of my room, and call to the maid for what I may want. For two years I had a favourite maid called Mary. It was in vain for me to attempt to call out "Mary;" my lips would compress, the upper teeth seizing the flesh inside the under-lip; the word would not come without extreme and painful effort, but there was one way towards perfect relief, I always called, "O Mary"—*i.e.*, I placed a vowel breathing before the consonant, and thus unlocked the complex, and in harmonious co-ordination of brain, nerve, and muscle, involved in the production of "M." In reading a lecture before a public audience, a terrible word is "method;" within the last ten years my upper teeth have made wounds inside the under-lip in getting out this word. I naturally avoided the ridicule of inserting a vowel-sound before an audience. Another occasion on which I am still constantly bothered is in saying "good morning" as I am shown out of a front door by master or maid; something unduly glues my tongue over the "g" in "good." I get over this difficulty by bringing into operation another mental act, and the action of a different set of muscles, by the act of lifting my hat; I can say "good morning" without stammering, whilst in the very act of lifting my hat. Here the same principle is involved as in putting a vowel before "m," spasm of certain muscles is relieved by diverting nerve-energy to other channels and other muscles. Again, if I feel that I am about to stammer in any word, I try to substitute another word. Often, in public reading, if I avoid the difficult word by some substitution, the same difficult word may recur many times, and I can speak it with little or no difficulty.

In the history of the sciences, philosophers have ever been obliged to portray their præ-ages—thus there have been the præ-Copernican, præ-Lavosierien, præ-Darwinian ages. We, in our generation, perceive that disease, too, has its præ-stages—a sudden pleurisy, or pneumonia, or fever, not to speak of great recurrent epidemics, have all their, as yet unrecognized, præ-stages; and no less has stammering very wide and deep-down correlations, ever existent in the individual. The wonder is that such complex phenomena as speech are attainable at all, and that so complex and harmonious a series of evolutions and co-ordinations attain to such a general perfection. The wonder is that so few people stammer.

Stammering is an expression of the irregular or non-harmonious evolution of certain parts of the brain and nerves. The large proportion of those who stammer badly when young cease to do so with the fuller evolution of the organism which arrives with man or womanhood. We see singular parallel irregularities of evolution in many other structures and functions.

But to confine myself to practical points. If I am reading a lecture in public which is legibly written, and if I have previously read it aloud to myself, I shall stammer little or not at all—in other words, I do not stammer when the nervous system is calm. Similarly, if speaking in a public discussion, I confine my mind to one simple point at a time, I do not stammer; but if the mind, in its active tumultuousness, sees too much or too widely the other possible relatives of the subject, and a fear of a want of clearness comes over the mind, then my speech is full of stammering.

The points which have seemed to me important toward avoiding stammering are to seek nervous calmness; if this be not attainable by the will, the sufferer can do something to divert the præ or present spasms—such as drawing in the breath, always keeping the lungs well filled with air in speaking, walking up and down the room, moving other parts of the body by an act of will, taking up a book or ornament, &c. I have made it a strict rule never to seek to force myself to say the difficult words, but stop, and use another word; or substitute some other words immediately preceding the difficult one. The sufferer should read aloud when alone, both poetry and prose. Stammerers rarely stammer when reading poetry aloud, when alone; the mind and nerves by poetry are induced into harmonic rhythm, just as they are by dance music, and irregular action is prevented. The words which the stammerer finds most difficult when in society, he will find easy enough, especially in poetry, when reading aloud in his chamber. I do not think that he should practice on these words, except when alone, and in the most calm way; he needs rather to read naturally as it comes, to forget that he stammers, and by practice of natural reading and speaking aloud when alone to educate the just co-ordination of nerves, &c. I found it best to walk to and fro in my chamber whilst reading aloud.

In the great proportion of cases, stammering in speech ceases with completer evolution of the organism. Toward this end a hygienic regimen in all that relates to food, drink, exercise, mind, and feelings is important; change of air and scenes would be valuable in the same direction.

Every individual stammerer will well repay special attention, for no two cases are exactly alike. I have benefited many by, as it were, throwing myself—my own case—into theirs, and going over with them their difficulties, as if we were mutually helping each other. In true education a good teacher, of any subject, must cast

In all cases of **RHEUMATISM, SCIATICA, LUMBAGO, BACKACHE, or STIFFNESS,**

One Single Rubbing

WITH THE PURE PRODUCT,

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Is guaranteed to do more good than six similar rubbings with any other Compound Oil, Embrocation, Liniment, or Patent Medicine advertised for the cure of similar maladies, and the proprietors of these preparations are challenged to refute this statement if they can.

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Is no American quackery, no mere mixture of Hartshorn and Oil or other worthless compounds. It is NOT a Patent Medicine, but it is a **PURE PENETRATING PRINCIPLE**, which penetrates to the root of the disease, and eradicates the malady, which compounds fail to relieve. DON'T DELAY. DON'T BE DECEIVED. *It has cured scores of the worst cases! It will cure you!!*

Many on reading the above will say, "These are bold statements, but can they be proved?" Our reply is that only on the strength of scores of unsolicited Testimonials have we dared to throw down such a bold challenge.

Our Files contain Hundreds of Letters from all classes of society, and we are prepared to substantiate our assertions to the letter.

The two following are typical of what we are in daily receipt:—

From Mr. J. SMITH, Station Master, Chapelhall, Airdrie. Feb. 6, 1890.

DEAR SIR,—I now take the opportunity of thanking you for your advice, for I believe if I had not continued using your **Wood Oils** I should have been a cripple for life, but can now say I am quite free from pain. A great many people acquainted with me have told me since my recovery that they never expected to see me better, or ever like what I am to-day. I felt the disease, SCIATICA, working on me for at least six months before I was completely laid up, during which time I had medical skill, patent medicines (here three largely-advertised compounds are mentioned), and everything that we could think of, but nothing gave me relief. Seeing your advertisement, I thought, as it was a cheap article "in comparison to others," I would give it a trial, and can assure you the first night I went under treatment with **Bayley's Wood Oils** was the first night's rest and sleep I had enjoyed for at least four months. Continuing the application, I gradually got stronger, and am now quite well again. Herewith I enclose stamps for four bottles of **Wood Oils**, not for myself, but for others in this district who have inquired what it is that has cured me. I may also say that the **Wood Oils** is very beneficial where there is a family. My little girl was suddenly seized with Croup. I rubbed her throat thoroughly, and never saw anything take effect so quickly—she got instant relief. For the sake of other sufferers, you are at liberty to publish this letter, or any one can write to me direct if they want further proofs—meantime

I remain, yours truly,
J. SMITH (Station Master).

P.S.—I omitted to state that for a long while before I got your oils I could not walk at all, and for some time with two sticks; am confident it was your **Wood Oils** which got me round so quickly. I was twisted all out of shape, and could not walk but in a stooping position.

From Mr. T. THOMSON, 14, Prospect-place, Drypool, Hull, Feb. 17, 1890.

DEAR SIR,—Receive my best thanks for the first bottle of **Wood Oils**, which arrived safely. I am glad to say I have derived more benefit from it than any other remedy, and as I have tried scores, including (here six largely-advertised, high-priced compounds are mentioned), and have also taken any quantity of pills, I cannot speak too highly of your **Wood Oils** as a remedy for RHEUMATISM.—Yours truly,

T. THOMSON.

From Mr. E. R. TOMBS, Duke-street Chelmsford, Feb. 25, 1890.

Please forward as soon as possible two bottles of your **Wood Oils**—the bottle I had has given great satisfaction.

Particulars of the case of Mrs. Grainger, 33, Bridgeman-street, Walsall, who after spending sixteen weeks in a hospital, undergoing two surgical operations, being then discharged as incurable, but was subsequently cured by the application of one bottle of **Bayley's Wood Oils**, are wrapped round each bottle.

☞ A further guarantee as to the genuineness of **Bayley's Wood Oils** is that we hold a Government Analysis, certifying to its Purity and Non-Liability to Stamp Duty. We challenge the proprietors of any Patent Medicine to produce a similar Certificate.

IF YOU SUFFER FROM RHEUMATISM, SCIATICA, NEURALGIA, LUMBAGO, BACKACHE, or STIFFNESS, send to your nearest Chemist for a bottle of **BAYLEY'S WOOD OILS, price 1s.**, as it is held in stock by all the leading Wholesale Medicine Houses in London, Liverpool, Edinburgh, and Glasgow. If he hasn't it in stock, he can easily procure it for you. If he refuses to do this, send 15 stamps to the Proprietor,

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IT IS SUITED TO BOTH SEXES AND ALL AGES.

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Dose for Adults: Half a Teaspoonful, more or less, as required.

Extract from *Lancet*, December 7th, 1889.—"This preparation we have found to give very satisfactory results. It is readily taken, and appears to be very efficacious and thoroughly free from griping properties."

From *British Medical Journal*, November 23rd, 1889.—"This preparation is free from the slightest unpleasant taste. We have practically tested it, and have found that even in half-drachm doses it acts as an efficacious purge, and that it does not produce griping."

From *Chemist and Druggist*, October 19th, 1889.—"This preparation is of a superior character, is free from the 'drug' taste of the leaf extract, and causes absolutely no griping."

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CANCEROUS DISEASES.

TESTIMONIALS.

The following is from Dr. John Sheerer, St. Albans, Sept. 5th, 1888.

MR. JOHN M. YOUNG, *Manager Missisquoi Mineral Springs.*

DEAR SIR,—My mother, Mrs. Susan Sheerer, of Virgil, Cortland County, N.Y., was pronounced by Dr. Brunson, of said town, to have had a cancer in her breast in 1866. She used two cases of Missisquoi Water, and was cured. She is now eighty-two years old, and in splendid health. Yours truly,

JOHN SHEERER.

MISSISQUOI SPRINGS.

[An Extract from "The Monthly Homœopathic Review," May 1st, 1870.]

By Dr. TUTHILL MASSY.

The Missisquoi Springs of Franklin, County Vermont, are at present rather frequently prescribed in England for diseases where the knife was the severe medicine of other days: I therefore deem it my duty to lay before your readers the experience which I have gathered relative to these Springs.

* * * * * * * *

The Spring A, Missisquoi Springs, is the one most generally exported, and which I have frequently prescribed. It gave great comfort to a lady who was suffering from a large open cancer in the right breast; cleansed the surface, relieved the pain, induced sleep, and diminished the tendency to bleeding, when applied externally, like simple water dressing, and taken in half-tumbler doses twice a day.

The benefits of the Spring A were very remarkable in a lady burdened with an ovarian tumour containing much water, with considerable abdominal tenderness. A few bottles always reduced her great size, and relieved her mind from the dread of an operation which was once proposed.

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"Try this Wonderful Medicine." The Cough and Weakness will disappear as if by magic, and you will feel a strength and power you never had before.

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Bronchitis and Asthma it relieves instantly.

The Spasms of Coughing so dreadful in Whooping Cough become less with each dose of the medicine.

"I have known your Lung Tonic cure a child of ten, as if by magic, after many other remedies and even change of air had entirely failed. I know it also to be invaluable to vocalists, lecturers, and public speakers.

"H. LASCELLES, *Professor of Singing, 349, Oxford-street, London.*"

"I have been subject to Bronchitis and Asthma for years, but am happy to inform you that three bottles of your Lung Tonic and one of your Embrocation have completely brought me round again to former health.

"FRANCIS QUINTON, 8, *Ebenezer-place, Hull.*"

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IRISH LINEN GOODS.

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BLOOD MIXTURE.

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D	10/6
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Made in Lengths, 13, 14, and 15-in.

his mind, as it were, into and under that of the pupil; he must move forward as the receptive pupil moves, and arrest, or must gently direct, when the pupil does not perceive or move; the stammerer must be dealt with in a similar manner, the sufferer has to be educated, and each sufferer will need individual treatment. There is no royal cure.

LEFT-LEGGEDNESS.

A paper on "Left-leggedness" was read before the British Association by Dr. W. K. Sibley, who said that Professor Ball in "Le Dualisme Cerebral" speaks of man as a right-handed animal. Being right-handed, it is popularly assumed that he is also right-legged, but this does not appear to be the case. Standing working with the right hand, there is a tendency to use the left leg for balance. Many people find less exertion in going round circles to the right than in circles to the left. Race paths are nearly always made for running in circles to the right. So the majority of movements are more readily performed to the right, as dancing, running, &c.

The rule in walking is to keep to the right, and this appears to be almost universal. It is more natural to bear to the right. Of a large number of people from the better-educated classes asked about the existence of the rule, only 67 per cent. males and 53 per cent. females were aware of the rule. The large majority obey it unconsciously in walking. Crowds tend to bear to the right. The left leg being the stronger, it is more readily brought into action. Hence troops start off with the left foot. It is the foot which is placed into the stirrup of the saddle or step of bicycle in mounting. So the left is the foot which a man takes off from in jumping.

In the experiments of Mr. G. H. Darwin, blindfolding boys and telling them to walk straight, the right-handed one diverged to the right, and *vice versâ*. From measurements of Dr. Garston of the skeletons of the two legs, in 54·3 per cent. the left was the longer, and 35·8 the right. For measurements of the feet, the author collected the drawings and measurements of 200 pairs, with the result that in 44 per cent. the left was longer, in 21·5 per cent. the right, and in 34·5 per cent. they were the same size. Measurement at the first joint gave 56 per cent. left larger, and at the instep 42·5 per cent. From the table of the figures it would be observed that the left foot is more frequently the larger in the male than female sex, and the percentage of feet of the same size is greater in the female. The percentage of the right larger than the left is very constant, whereas the numbers of the left larger and those in which both feet were the same size are much more variable. Man, being naturally or artificially right-handed and left-legged, tends unconsciously to bear to the right; lower animals, on the other hand, appear nearly always to circle to the left.

Constipation and Vomiting in Pregnancy. — An Austrian physician reports a case of obstinate vomiting in pregnancy, which was immediately relieved by emptying the bowels by enemata. As long as the bowels acted regularly there was no trouble, but the vomiting returned whenever constipation was present.

CHEMICAL ANALYSIS.—Dr. Drinkwater, Lecturer on Chemistry in the Edinburgh Medical School, undertakes the Analysis of Water, Foods, Wall-Papers, and of all other products and articles connected with Household Health and Commercial Interests. Terms on application to Dr. Drinkwater, Chemical Laboratory, 41, Chambers-street, Edinburgh.

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

A NEW TREATMENT OF GALL-STONES.

Fifteen years ago the treatment of gall-stones by the use of large doses of olive oil was introduced into practice in America, and the results have recently been discussed by Dr. S. Rosenberg in a paper before the Berlin Medical Society.

He dealt with the literature of the subject, twenty-one cases in all, in nineteen of which there was relief, and two no effect. He quoted three cases of his own. After the use of the oil, a number of concretions passed of green colour, faceted shape, and waxy consistence. These were, however, found to be made up of saponified fat, and apt to be mistaken for stones. Along with these, however, true gall-stones came away, and the patients were much relieved. The quantity given was about six ounces.

Rosenberg entered into the question of the action of olive oil on the liver activity, and compared the results with those of other methods of treatment. Any remedy to be of service in the removal of gall-stones ought to possess the power of increasing the amount of bile, and at the same time lessening its consistence. The use of alkalies is uncertain, as their action in increasing bile-flow is very much dependent upon individual circumstances. Durande's mixture of turpentine and ether does not increase the flow of bile. Turpentine alone can produce such an effect, but only in such large doses that serious consequences are the result.

Bile, itself is often administered—it is a marked cholagogue or liver-stimulant, but the biliary consistence is increased. Salicylate of sodium is of much repute. Rosenberg gave it in one case in 15 grain doses three times daily, in half a litre of hot water, and twice daily as a high rectal injection of 75 grains dissolved in a litre of warm water. The result was excellent, gall-stones appearing in the stools twenty-four hours after. As to the *modus operandi* of olive oil, Touatre, of New Orleans, suggests that it finds its way into the bile passages, where it softens the concretions and facilitates their expulsion. Rosenberg declares this to be unphysiological, although in the after-discussion Virchow stated that from his own observation oil had been absorbed and excreted through the bile ducts.

Rosenberg holds that by the ingestion of oil the contents of the gall-bladder are increased, in contradistinction to the usual text-book statement that the secretion is diminished. His experiments show that under the influence of large quantities of oil or fat a great increase of bile with considerable dilution takes place. This increased secretion exceeds that which follows the administration of bile or salicylate of sodium—which have been recommended by many as the most powerful of cholagogues—both with regard to the extent as well as to the duration of the action; so that he considers oil in large doses the most effective bile-producer. Experiments made on a dog with biliary fistula showed that the flow of bile was much greater after olive oil than after any other method of treatment.

He attributes the comparative rarity of gall-stones in Italy to the constant use of oily salads among the people. The oil treatment is not indicated in every case of gall-stones, as frequently there is intolerance. It is best in

the first place to give the usual forms of treatment a trial, especially that by sodium salicylate. If these fail, one may fall back on the oil. Even intense jaundice is not a certain indication. The mode of administration is important, as fluid fat frequently engenders sickness. The addition, therefore, of menthol, cognac, and finely ground yolk of egg becomes valuable. Whether it should be given in larger or smaller portions depends on circumstances—at all events, it is a mistake to abandon it on failure at the first trial. The attempt ought to be renewed; and even if successful, it is advisable to repeat it several times to prevent a recurrence of the symptoms.

The prevention of the solidification of bile may be helped by small doses of salicylate of sodium for a long time, or the use of oil or fat in form of oily salads, fat sauces, bacon, &c., while catarrh of the bile ducts may be benefited by alkalies and alkaline mineral waters.

COMMON SKIN AILMENTS AND THEIR CURE.

A popular supposition exists that a disease of the skin is of no great moment, save from the personal discomfort involved. Such an idea is very erroneous. A little sore upon the lip may end in serious disease, the poison from which may be absorbed into the glands, irritating them and rendering recovery impossible. Prolonged irritation of the skin is more or less likely to develop very grave ailments, and a bad condition of the skin means undoubtedly a bad state of health.

Eczema is responsible for a large half of all our skin-troubles. A few words on the treatment of it may therefore be welcome. Eczema is a catarrhal state of the skin, accompanied with intense itching. To relieve the itching and cure the disease, Vinolia, used as an ointment, stands first. This excellent remedy will not cure all cases, though it is efficacious in the majority. It is in any case perfectly safe to use; and when it will not cure eczema, a physician who is a specialist in skin ailments should be consulted.

After eczema, in order of frequency, comes acne, and this is pre-eminently a disease of the face. It occurs as little spots, arising from filled-up skin-ducts, sometimes with "blackheads" and sometimes as rosy-red pimples. Sometimes they suppurate and leave scars quite as bad as those from small-pox. Acne is always curable, but is seldom cured. First of all, the contents of the uninflamed blackheads are to be squeezed out. The red pimples may be pricked, and thus brought to a head in a few hours and squeezed. Vinolia (with an ounce of which half a drachm of calomel has been thoroughly incorporated) should be applied three times daily. To the use of Vinolia itself when actual skin-disease is present, must be added the employment of Vinolia Soap. The medical variety of this soap is adapted for skin-troubles; while the toilet soap is unsurpassed for its soft and bland nature, and for its promotion of the health and beauty of the integument.

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Public Health

"Health is the first Wealth."—*Emerson.*

THE COST OF UNHEALTHY DISTRICTS IN A CITY.

One of the most important matters to be considered in connection with any proposed scheme of municipal sanitary improvement is as to how far the cost to a city of making the changes or additions required will be off-set by the diminution of municipal expenditures for treating the sick, burying the dead, &c., and by increased income due to increase in the value of the property treated, and consequent increased revenue from taxation. It is very difficult to make such calculations with any degree of minuteness or precision, and it is claimed by the opponents of improvements that those who urge the destruction of unsanitary houses, the opening up of close, ill-ventilated, and filthy courts, the putting down of a system of sewerage, or the bringing in of a pure and efficient water-supply, exaggerate the value of the results to be thus obtained, and lay entirely too much stress on what may be called indirect damages, due to theoretical computations as to the value of a certain number of human lives. It is therefore of special interest to find a careful study, from the pecuniary point of view only, of the question as to whether it pays to have foul and over-crowded tenement houses and the class of people who throng to such houses in a city. This study has been made by Dr. J. B. Russell, the Health Officer of the city of Glasgow, and the results given in an address before the Philosophical Society of Glasgow, under the title, "Sanitation and Social Economics: an Object Lesson."

For this purpose he takes a particular district of the city, known as District No. 14, covering about 35 acres, and containing generally the most degraded portion of the population of the city, having the largest proportion of inhabitants in houses of one room, the highest death-rate over all, and the highest death-rate under five years, and compares it with the whole city.

In 1888 this district had a birth-rate of 30·49, a death-rate of 32·45, a death-rate of children under one year of age of 239 per 1,000. In the city the corresponding figures were: "Birth-rate, 34·92; death-rate, 20·91; and death-rate of children under one year of age, 133 per 1,000. In this district 25 per cent. of the children born were illegitimate; in the city 8 per cent were illegitimate. The principal causes of the high death-rate in District 14 were infectious diseases and diseases of the lungs. Over one-fourth of the total cases of sickness were treated in public institutions and at the expense of the city; over 4 per cent. were treated at the expense of voluntary charitable institutions. The probability is that in this district very little medical aid is furnished except what the public pay for, or the profession bestow for nothing.

Thirty-seven per cent. of all who died were buried at the public expense; this is exclusive of 10 still-born children also interred by the sanitary department. Of the children born, 10 per cent. gained their lives at the cost of charity and the public rates, and their mothers had to be maintained and provided for during this period. A very much larger number of the women received private charity in the shape of attendance by the doctors and nurses of the Maternity Hospital. At least 55 per cent. of the children made their entrance into the world

by the help of private charity or of the city rates. The corresponding rate for the whole city is about 25 per cent. Vaccination is another item of expenditure necessary to be incurred on behalf of every child born who does not die before the six months allowed by law have elapsed. A large proportion of the children of District 14 do so die, and the vaccination of the remainder, about 50 per cent., is effected at the cost of the city, as compared with 25 per cent. for the city at large.

Within this district during the year there were over 7,000 inspections of nuisances required, 300 inspections of common lodging-houses, 2,600 inspections of ticketed houses, &c., summing up a total of 16,529 expenditures of official time within the district, or 231 per 100 of the population; in the city at large the corresponding services amounted to 84. Behind all this personal service within the district followed a proportionate amount of office work, of removal of nuisances, of work in the police and other courts, of outlay for treating infectious diseases, in cleansing and disinfecting houses, &c. Corresponding expenditures in this district are required in the Police Department. District 14 is the Alsatia of Glasgow, and furnishes the greater part of the work of the Central Police Court.

All this then may be considered as the debit side of the social account of District 14, and having summed this up Dr. Russell turns to the credit side, so far as it can be shown from the payment of rates. It is shown by investigation that about 55 per cent. of the householders in District 14 contribute nothing to municipal taxation, the corresponding proportion for the whole city being about 28 per cent., and most of this deficiency in District 14 is due to the fraudulent escape, on the part of the householders, from their legitimate taxes. It is interesting to see how the gas and water trusts cover the risks of doing business with this class of the population. The gas trust is protected by having the power to insist upon a deposit as security before the gas is supplied. The consequence is that a considerable proportion of the tenants use no gas at all, but employ paraffin lamps. The landlord is responsible for water-rates on rentals under 50 dols. per year. Thus we have in District 14 a population which is unhealthy, reckless, contributing little or nothing to the public purse, and, on the other hand, drawing largely from the city funds, and throwing themselves on the legal and charitable resources of the public in their sickness, their births, their deaths, and their burials. The decent, respectable, hard-working taxpayers of the city have to bear the burden of the afflictions imposed by the persons of such a community as that which exists in District 14. This burden cannot be in any way got rid of so long as such places and people exist. If the city will not pay for improvements, for the removal of and reconstruction of their unwholesome dwellings, it must pay not only the taxes which should properly be collected from this property if it was in decent condition, but it must pay the cost of the results produced by these conditions. "If," says Dr. Russell, "you object to pay for the prevention of their disease, you must pay for the treatment of their sick, and you must at least pay for the burial of their dead. After their poverty has exhausted the provisions of the law, it seizes hold of the skirts of your benevolence and will not let them go until it receives a dole."

In such a district as that described by Dr. Russell the deaths every year outnumber the births. If no recruits were permitted to join the inhabitants the population would dwindle away and ultimately become extinct. How is recruiting the ranks of this class to be prevented? One means certainly is to get rid of the foul tenements which attract them. It is asserted that there must be such places for such people; but, as Dr. Russell remarks, those who make this statement are generally the owners of such property.—*Engineering and Building Record.*

THE DRY-AIR FALLACY WITH REGARD TO CONSUMPTION.

The Congress of Climatology, which was held in Paris in connection with the Exposition, seems to have been interesting and important. About two hundred members were present, including the President of the French Meteorological Society, M. Renou, who was elected President of the Congress, and many other distinguished experts, representing fourteen countries. One of the best observers of them all appears to have been M. Youji Wada, a delegate of the Japanese Government, who spoke of the hot springs of Japan, and asked the Congress to explain why it was that before a cyclone the temperature of the water in the hot springs rose, while the evaporation diminished. No one was able to suggest a solution of this problem, or of another one, propounded by the same delegate, in regard to the influence of the discharge of smoke from volcanoes.

Curiously enough, this convention of climatologists, including distinguished physicians from many of the most renowned health-resorts, was nearly unanimous in ascribing very little virtue to the climate of such resorts, and, still more curiously, there was a diversity of opinion as to what qualities of climate would be favourable to invalids, provided they could be secured with certainty. Dr. Labat has found in the Isle of Bute, on the coast of Scotland, in the latitude of Labrador, "vegetation very similar to that of the south of France," while "at Nice would be experienced one of the worst climates of the world," and he considered that the real secret of the good effect of a change of air consisted in "the choice of the house where the patient lived," and "the hours and the place where he took exercise."

Dr. Chiais, of Mentone, supported this theory, and believed that if delicate persons, staying in the Riviera for their health, would be more careful about their habitations, and the way in which they spent their time, many lives might be saved. He had found that during the winter, particularly in January and February, there were atmospheric perturbations on the Mediterranean coast, which were accompanied by a great increase of dryness in the air; and these perturbations were "always followed" by "an increase of illness and dangerous symptoms." For this reason he thought that patients should study the hygrometer, and, on the approach of dry weather, should keep within doors until a change took place, using some means to evaporate water in their rooms, to supply the deficiency of moisture in the air.

This observation, which is the more remarkable as contradicting nearly all our received notions as to the beneficial influence of dry air in consumptive cases, and in checking the diffusion of contagion and malaria, seems to have met with the approval of the Congress, although it was agreed, in another part of the discussion, that in the treatment of consumption the most favourable climate was a sunny one, free from dampness and wind, such as found in many mountain resorts; and that, if these conditions were fulfilled, a low temperature was in many cases not injurious.

Before adjourning, the Congress made the sensible

suggestion that the professed health-resorts were often so badly drained and policed, as to injure, rather than benefit, the persons who came to them. Dr. de Valcour, of Cannes, said that if it had not been for the pertinacity of the English visitors, no sanitary improvement would ever have been made in that town; and it was voted that in France sanitary legislation was desirable, to compel hotel-owners to adopt the measures necessary to avoid poisoning their guests with noxious effluvia.

A Gum Contract.—The French post office department has received tenders for the next year's supply of gum arabic needed in the manufacture of postage stamps. The specifications called for 40,000 kilos., or about 40 tons. The department began making its own stamps in 1875, when the total issue was about 700,000,000. For 1890 the estimated number will be 3,000,000,000, of which only 7,500,000 are for Monaco, Tûnis, and the colonies. Last year 169f. the 100 kilos.—say 17 cents per pound—was the price contracted for. This year, if the sealed proposals have been opened, the results have not yet been published.

Rest and Exercise in Heart Disease.—In the treatment of more than one disease there has always been a conflict between those who advocate rest and those who advocate exercise as a remedial agent. The fact is, these differences are more apt to occur on paper, where inferences are hastily drawn from a few cases. More than five years ago Oertel advocated for certain forms of functional heart trouble, not rest, but active exercise, such as mountain climbing. Before him Stokes, of Dublin, had noticed that heart cases did well in climbing the Alps. In prescribing mountain climbing the utmost care is necessary, as the distance to be covered should be regulated for each patient. Its object is to strengthen the heart muscle and promote the circulation. As only healthy arteries can stand the strain, such treatment is, of course, contra-indicated in atheroma. Loomis has reviewed this subject and given his experience with it. In the early history of physical diagnosis the detection of a heart murmur was always looked upon as a grave event, and even now many clinicians hearing a systolic apex murmur forthwith pronounce the diagnosis "mitral regurgitation" without sufficiently considering the other signs and symptoms. Such cases often do well with exercise and out-door life. In fatty degeneration, the heart in a young person can stand a moderate amount of exercise, and can undoubtedly be strengthened; but it is in fatty infiltration or fatty overgrowth that the judicious use of exercise does great good. In this case the general diet should be regulated, and the general obesity which usually exists should be removed by a depleting diet. Some German physicians in their city practice recommend stair climbing when mountain climbing is not feasible. It is undoubtedly a fact that cardiac exercise of this kind has proved of benefit to patients in Germany, and there is no reason why it should not be used in the same way in England. Those patients under forty without hypertrophy, and with other organs intact, often recover entirely, or at least improve greatly—while the murmur still continues, affording them little or no inconvenience.

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When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."

—*Charles Mackay.*

ELECTRIC PROSTRATION.

By A. Van Hoff Gosweiler, A.M., M.D.,
Physician to Baltimore Eastern Dispensary.

This is a peculiar disease in persons whose duties require constant working under electric light, the recent outbreak of which is said to have caused not a little uneasiness in certain manufacturing regions.

The disease, which is known as "electric prostration," results from exposure to the arc-light, and lays siege to the subject's throat, face, and eyes. Some very severe cases are reported from Creuzot, a town in France, a large number of men being kept at work in that town in a factory where metals are heated by an electric furnace, the strength of which is over one hundred thousand candle-power, and while this is not in itself sufficient to damage the men, the intense brilliancy of the light brings on the "electric prostration."

A communication has been made by a well-known oculist of Cronstadt, a city in Russia, concerning the bad influence of the electric light upon the eye. There have come under his observation, within the past year, thirty persons suffering from a disease of the eye. The symptoms are the same in each case, and all the patients had, perforce of their employment, been accustomed to remain for hours at a time near electric-lighting apparatus. The disease is also called photo-electric ophthalmia. The patient is apt to be awakened in the night by great pains around the orbits, accompanied with an outpouring of tears, intense photophobia, and smarting pain. The first symptom is a painful sensation in the throat, together with irritation and copious discharge of tears for forty-eight hours. The chemical rays irritate the conjunctiva, resulting in actual inflammation of the eyes. The patient's skin, meanwhile, takes on an actual erythema, assuming a copper-red colour, and, after several days, peels off in various places, and he is otherwise made to feel the unpleasantness of his situation.

A general outbreak of such a disease as this would involve serious consequences. The number of men whose employment brings them in contact with electric light is enormous, and is likely to increase at the same ratio as the comparatively new agent supplants the old means of illumination and becomes used as a motive power. Recent events prove that electricity has passed the experimental stage, although improvements are to be expected. Some claim that the electric light is destined ultimately to supersede gas as a lighting power entirely, and a malady springing from contact with the new power would be a grave matter.

The only remedy so far applied in cases of "electric prostration" has been the wearing of a shade over the eyes by the people affected. This relieves the direct strain upon the eyes, but does not mitigate the gravity of the other symptoms. The disease bears an evident resemblance to that known as "colour-blindness," the victims of which are workmen whose duties entail a constant scanning of parti-coloured lamps at night in railroad service. The electric light is far too valuable an agent to be retarded in its advancement by a drawback which medical specialists could remedy.

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SIR MORELL MACKENZIE and *over 700 leading Physicians and Surgeons* have given written testimony as to the supremacy of *Stern's Pumiline* preparations over all others. They contain the purest essences of the *Pinus Pumilio*, a particular variety of pine, growing nearest the snow level of the Alps. They exhale the beautiful and refreshing fragrance peculiar to the Alpine pine forests, and possess their exceptional curative and invigorating properties in their purest and most concentrated form.

One of the Physicians to H.R.H. the PRINCE OF WALES, writes: "Nothing gave my patient so much relief as STERN'S PUMILINE."

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light and the minimum of heat, and yet a short exposure to the arc-light is followed by increased lachrymation, photophobic pain, swelling of eyelids, and acute conjunctivitis. The nervous symptoms and discomfort present are manifestly caused by this peripheral irritation. However, there are cases recorded in ophthalmic literature in which harmful effects and visual disturbances have resulted from exposure of the eyes to intense sunlight on Arctic snow-beds, and extraordinary lamplight. The effect is claimed to occur through the sympathetic nervous system rather than as the result of mechanical or even chemical influences. As it is not only transitory in nature but functional in character, so the resulting reflex neuroses, anæsthesias, and paralyses vary in degree and are of short duration. It is not even proven that exposure to bright light of any kind can produce a diffused iritis, nor that acute conjunctivitis will invariably follow. No case of injury to the eye or any part of the body by the incandescent light has been reported, while the dynamo-current has caused immediate death by mechanical force.

Dr. Rockliffe records a case of acute conjunctivitis, which he referred to the action of the electric light, the patient having been engaged in adjusting the carbon points of a Siemens' electric lamp of three thousand candle-power, which he did without coloured spectacles. After a short exposure to the light the patient was unable to perceive the people on the street, but the effect soon passed away. Much depends on the nature of the light. An excess of current produces a violent light, or a defect of current gives an orange light; both of which are less injurious than the normal white light.

Dr. David Little records a case of retinitis occurring in a gentleman engaged in scientific experiments with the electric light, who had neglected on one occasion to put on dark spectacles; the box containing the light was suddenly opened, and the light fell upon his right eye. It was a great shock to him; his eyes were blinded for several minutes, and were intolerant to light of any kind for two weeks, while over the optic disc and retina immediately around there was haziness for two months. Personally, I have seen several cases of true nervous manifestations, evidently caused by high-pressure electric light. They were not known as neurasthenic individuals, nor had they previously defective vision. I therefore cite the case of a patient who was engaged in work with the arc-light, which necessitated his gazing with the naked eye at the light from a distance of a few inches. He awoke next day with smarting in the eyes, shedding of tears, photophobia, congestion of the conjunctiva, and nervous excitability.

The worst cases generally arise from adjusting the lamp (two thousand candle-power while burning) without goggles or smoked glass. The distance of the eyes averages about twenty inches, and with weak eyes the last-mentioned patient claimed that one minute was sufficient to produce certain inflammation, and thirty minutes increased lachrymation and swelling of eyelids. If there is no interocular trouble present, a drop of the solution of atropine gives instant relief.

All who have used the incandescent lamp in reading-rooms, libraries, or theatres have expressed great satisfaction with it. The seven hundred Edison lamps which now light the New York Hospital throughout, afford a striking proof of its sanitary fitness and use, and with the aid of movable reflectors enable the performance of operations at night, and maintain a better and more uniform temperature in the wards than with the use of gas. All incandescent lamps have globes embodied in their construction, which can be obscured and coloured as desired. A brilliant effect is obtained by silvering one-half of the globe; a reflector of great power is thus obtained in an advantageous position. The light is so perfect that it need not be used close to the eyes, and the efforts of accommodation are lessened. In view of its steadiness, the iris does not suffer though always taxed with the flickering light of gas. An opaque lamp-shade, made of glass or tin, should be used, and the light thrown down upon the work when needed.

More than ever private residences are being wired for, and lighted by, electricity, and to a notable extent in growing and enterprising large towns. The high pressure current is transformed by means of the converter to a low potential, and carried into houses at the safe and low pressure of only fifty volts, and, thus utilized in that form for incandescent lighting, is not dangerous to human life. Chandeliers and brackets have been designed for the incandescent lamp of Edison in great variety. In view of the facts that the Edison lamp will burn in any position, its absence of heat, the small size of its wires, its non-consumption of oxygen or vitiation of air, it is clearly proven to be conducive to utility and elegance, and is to be recommended, independent of commercial interest, for true sanitary purposes and genuine comfort instead of gas.

What Produces Death.—Some one says that few men die of age. Almost all persons die of disappointment, personal, mental, or bodily toil, or accident. The passions kill men sometimes even suddenly. The common expression, "choked with passion," has little exaggeration in it; for, even though not suddenly fatal, strong passions shorten life. Strong-bodied men often die young—weak men live longer than the strong, for the strong use their strength, and the weak have none to use. The latter take care of themselves, the former do not. As it is with the body, so it is with the mind and temper. The strong are apt to break, or, like the candle, run; the weak burn out. The inferior animals, which live temperate lives, have generally their prescribed term of years. The horse lives twenty-five years, the ox fifteen or twenty, the lion about twenty, the hog ten or twelve, the rabbit eight, the guinea-pig six or seven. The numbers all bear proportion to the time the animal takes to grow its full size. But man, of all animals, is one that seldom comes up to the average. He ought to live a hundred years, according to the physiological law, for five times twenty are one hundred; but instead of that he scarcely reaches an average of four times the growing period. The reason is obvious—man is not only the most irregular and most intemperate, but the most laborious and hard-working of all animals. He is always the most irritable of all animals, and there is reason to believe, though we cannot tell what an animal secretly feels, that, more than any other animal, man cherishes wrath to keep it warm, and consumes himself with the fire of his own reflections.

Fifth Edition.—Now Ready.—Greatly Enlarged, and completely Revised.

"A Book every Young Man should read."

"A Lecture to Young Men on Purity of Life and the Preservation of Health." By A Graduate. Price One Shilling, or post-free, 1s. 1d., from Henry Renshaw, Medical Publisher, 356, Strand, London, W.C.

This pamphlet, now being issued in its Fifth Edition, forms a complete refutation of quackery of all kinds, and is a safe and reliable guide, from the medical standpoint, to all young men. Every Youth should read this pamphlet as a guide to the safe conduct of life in a moral and physical sense.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Dress Reform.—I am one of those who think that the boy and girl should be brought up together, receive exactly the same education, be dressed alike, and allowed to adopt similar professions. In fact, I uphold that woman should be regarded as man's equal in all things, and not be forced into marriage simply to make herself a home. Until perfect equality is acknowledged between the sexes, no great social improvements will ever take place, and the first step to acquire perfect equality is a reformation in dress. Lady Harberton has kindly asked me to give my opinions thereon. Having consented to do so, I must speak plainly, as I feel, or not at all. I say there are only two rational forms for a woman's dress: one is a short petticoat or kilted skirt, reaching to the knee; the other, trousers or knickerbockers. Personally, in Scotland, I never wear anything else in my own house or at shooting parties but the former style of dress, which I regard as both elegant and comfortable. In a kilt (knickerbockers underneath) I can walk any distance and over the roughest ground; in a woman's ordinary dress I could not go a yard. I think the only way to get a certain style of dress adopted, is to hold meetings, form clubs, and agree to wear the dress decided on. If I could get 500 women to form themselves into a club and adopt the kilt, I would march at their head through London and hold a demonstration in Hyde Park. It is useless individuals adopting it, they would only be mobbed. In 1879 I travelled over hundreds of miles of unexplored ground in Patagonia. Well, I simply dressed like a man, and rode like a man on that occasion—the only rational thing to do. I was comfortable and happy, and I don't think I looked any more unsightly than did my men companions. I know they laughed very much when I returned to my hideous woman's attire. Men will continue to regard themselves as the dominant race until woman's dress is reformed. I have many men friends. My dearest and best friends have been and are amongst men. The reason is, that since childhood upwards I have laughed at Mrs. Grundy, and have indulged in the sports, pastimes, and duties for which I felt myself fitted, and which have, in all cases, been men's pursuits. A neat and effective upper garment to the short skirt or kilt, where jacket and waistcoat is not worn, is a plain dark-blue fisherman's or football jersey. For comfort this is unequalled, and I rarely wear anything else myself. As for stays, I do not possess such an article. There are many women pining their lives away for something to do, many who could adopt professions were it not for the dress that betrays their sex. My advice to these women is, "Go and adopt man's dress, next their professions, and prove to the world that a woman, if not hampered by cruel conditions, is every inch as capable of fulfilling them as men."—*Lady Florence Dixie, in the "Rational Dress Society's Journal."*

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Drunkenness and its Cure.—Still much remains to be done on a large scale by further legislation and greater combined efforts which should unite the energies of the scientific and religious world into one focus. But individuals may still do much, and each medical man may be a unit of great importance by giving a tone of thoughtful consideration to all his dealings with those in whose daily contact he is. Women recovering from their confinements may be warned against the false strength derived from stimulants; parents may be induced to bring up their young children without their least use, and in the serious moments of convalescence many a chance offers itself much oftener to the doctor than to the cleric to speak a telling word in favour of abstinence. The work of dealing with particular cases of inebriates in private practice is very up-hill, very painful, and often singularly ungrateful; but how much of the other work of life is the same. Nevertheless, the successful treatment of one inebriate, and the restoration of him to a life of sobriety and sanity, may well give a man a greater thrill of joy and pleasure than the achievement of some special triumph of surgery, or the addition of one's name to the roll-call of scientific discoveries. It is a matter of man dealing with man, and the stronger will guided by the strongest of all wills conquering. One of those very quaint sayings of Jerome Cardan, a sixteenth century medical professor of medicine at the University of Pavia, seems to describe the tone too much taken up by society in its attitude towards drunkards. He records that in warning a youth against evil company, he said to him:—"I can show you many an apple that has become rotten through lying with others in a heap, but I can show you no heap that has made a rotten apple sound again." An argument like this passes as the shrewd judgment of a keen observer of life, but in this age, whose singular characteristic is its desire to restore and preserve, it ought not to be applied by medical men towards inebriates. Indeed, a doctor should make it one of his own claims to inner happiness and self-contentment to have been the means of not only checking any spread or growth of intemperance, but also of having at least attempted the rescue of special cases. The effects of any such attempt will do nothing but good on him who tries it; if successful, the result will be a noble one; and, after all, is it not far preferable to fight in vain and seemingly fruitlessly in some causes, and under some banners, than to merely go and swell that band, already too great, of pessimists, indifferentists, and all those who, standing on the brink, watch calmly, after the manner of Lucretius, those who are struggling in the great storm-tossed ocean of intemperance and vice? There are many superbly exalted lines to be found in Milton's poems, and nowhere is man's God-like struggle against all that is wrong more beautifully typified than in the blind poet's utterances of his blind hero, the "Samson Agonistes." In that grandiose poem occur these lines, which seem to the writer to worthily express the views which caused him to write these few crude thoughts he has so inadequately expressed:—

"O madness, to think use of strongest wines
And strongest drinks our chief support of health,
When God with these forbidden made choice to rear
His mighty champion, strong above compare,
Whose drink was only from the liquid brook."
—*Provincial Medical Journal.*

In the early stages of disease, when doubts arise as to the diagnosis, an invaluable opportunity for instituting protective measures is often lost by awaiting, inactive, the future development of the symptoms. Suspicions of the infectious nature of the disease demand the prompt use of measures of precaution. Epidemics have occurred through the dilatory action of the physician, who, while waiting for distinctive symptoms before employing the means of prophylaxis, has allowed the infection to escape beyond his control.

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

SOME MINOR BOOKS.

The Three Midshipmen, by the late W. H. G. Kingston, is, of course, a classic work, and Messrs. Griffith, Farran & Co., in issuing it at the price of sixpence, have only conformed to the prevailing taste for cheap editions. The present work is clearly printed; although the type is small, it is easily read, and is altogether a marvel at the price.

Little Dinners by a Live Lord is the title of a shilling book, issued from *Society* Office, 359, Strand, London, and describing the various restaurants of the metropolis, as well as "provincial" hotels. The book is written in a chatty style, but we confess that its perusal is rather apt to pall upon the reader on account of the necessarily unvarying and monotonous character of the subject.

Modern Gymnastic Exercises (Part II., Advanced). By A. Alexander, F.R.G.S., Director of the Liverpool Gymnasium. (London: G. Philip & Sons. 1890.)

This is an addition to the excellent series of manuals on athletics for persons of all ages, written by Mr. Alexander, whose experience as a teacher of gymnastic exercises has been of such wide character. The Earl of Meath contributes a preface to this work, which is illustrated by a frontispiece of the muscular system, and by 270 engravings. Very full and complete instructions are given by the author regarding the movements and exercises calculated to develop the frame; and the manual is therefore one which should be found in the hands of all young men anxious to grow strong by aid of the natural culture of bone and muscle. It is cheering, indeed, in these days when the degeneration of town life is so much talked of, to know that efforts are not wanting by way of counteracting the physical retrogression of the race; and Mr. Alexander's last book is a proof of the thorough manner in which the problems of physical education are being attacked and solved.

Ambulance Lectures: First Aid to the Injured. By Sam. Osborn, F.R.C.S. (2nd Edition.) (London: H. K. Lewis. 1890.)

It is unfortunate that writers on ambulance appear also to have to play the part of teachers of elementary physiology; for much space is thus occupied in ambulance handbooks with sketchy descriptions of the body's structure and functions; and besides, such information should have been acquired by students before they attempt to learn "first aid" principles. Mr. Osborn's book exhibits this defect—one, of course, for which the author is not responsible. For the rest, his book fairly explains ambulance work. It can claim no merit, however, over the numerous other manuals of the subject, and in respect of its illustrations it is decidedly susceptible of improvement. The cuts are mere outlines, and one in particular (p. 51) is rather confusing than otherwise in appearance.

MAGAZINES OF THE MONTH.

Harper's Magazine for March is a brilliant number, and contains a variety of illustrated papers, such as is likely to suit the tastes of readers of all shades of opinion. Mr. W. D. Howells begins a story, "The Shadow of a Dream," while articles on "The United States Army," "Manila and its Surroundings," "How to Listen to Wagner's Music," and "The Cobra Stone" make up a most interesting programme. In *The Gentleman's Magazine* an article on "Examining a Scotch School" will be read with pleasure. Dr. Crespi, in an article on a visit to Pasteur, really leaves the reader who has perused the article where he was at the commencement of the perusal. The author does not appear to have made up his mind whether or not Pasteur's hydrophobia treatment is real and beneficial. His reference to "the very distinguished editor of the *Provincial Medical Journal*," to whom Dr. Crespi applied for "the most recent scientific opinion on the subject," is somewhat beside the mark. Dr. Dolan, the editor in question, is a known and able, but very hostile, opponent of Pasteurism. To ask his opinion about Pasteur's work is therefore tantamount to demanding from counsel for the plaintiff his views regarding the defendant's case. *The Season* for March is, as usual, well to the fore with the latest fashions in ladies' dress. Messrs. Cassell send us Part 41 of *The Illustrated History of England*, and Part 17 of their *New Popular Educator*—both excellent works of educational kind.

Insanity among the Australian Aborigines.—In a paper read before the Intercolonial Medical Congress of Australasia, Dr. Morton Manning, the Inspector-General of the Insane in New South Wales, gave a most interesting account of the cases of insanity found to have occurred among the aborigines of Australia. Mental disease would appear to have been a very rare affection whilst they were in their primitive and uncivilized condition, and the manner in which they dealt with the few cases which did arise was of the most drastic nature. "If the lunatic was violent or aggressive, he was promptly slaughtered; if melancholy, he was allowed, if so disposed, to commit suicide; if demented and helpless, he was allowed to die; and only when quiet and peaceable, and when his erroneous ideas did not result in offensive acts, was he allowed to continue in the tribe." In the course of time, as the aborigines were brought more into contact with civilization and its attendant vices, insanity increased rapidly in proportion to the number of the population, and Dr. Manning states that, since 1868, 18 aborigines had been admitted into the asylums of New South Wales, from a population which has never during that time exceeded 2,500, and is now less than half that number. In the census year, 1881, the proportion of the aboriginal insane to the aboriginal population of New South Wales was 2·83 per 1,000, a proportion in excess of that for the general population, and at the close of 1887 it was upwards of 5 per 1,000. The causes of insanity in the 32 cases of aborigines admitted into the asylums of Queensland and New South Wales were in a considerable proportion of the cases due to drink. The prevailing type of the malady was mania passing rapidly into dementia, with filthy and degrading habits. All the melancholic cases originated in gaol. Three were epileptics. No case of general paralysis or anything like it was seen. There were 20 deaths, and in several cases the only cause which could be assigned was marasmus—a gradual wasting without tubercular or other manifest ailment. The average duration of life was much shorter than in Europeans; the confinement, though tempered by many unaccustomed comforts, being apparently the great factor in shortening life.—*British Medical Journal.*

IMPORTANT ANNOUNCEMENT.

A NEW VOLUME BEGAN WITH THE NUMBER FOR FRIDAY, OCTOBER 4th, 1889.

BONUSES TO SUBSCRIBERS TO "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor*.

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. Those intended for the Publishing Office to be sent to MR. A. P. WATT, THE PUBLISHER, at the same address.

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH. A limited space only, is available for the insertion of replies each week.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

NOTICE TO WRITERS OF ARTICLES.—All articles sent to the Editor of HEALTH must be accompanied by stamps to ensure their return in case of rejection. It must be distinctly understood that the Editor and Proprietor do not hold themselves responsible for the loss of rejected communications.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

MRS. HAMILTON.—Merely a nervous symptom. Do not take many potatoes for a time, and eat very slowly. Take five drops of pure Terebene on a piece of sugar when the flatulence troubles you.

CUTICLE.—Have you ever given the Dee Oil a trial? If not, do so. Obtain it from your chemist (Dee Oil Company, Chester, are the makers), and use it simply as an application to all the affected parts. The use of the ointment ordered to "J. Jenkins" in HEALTH No. 358 might also assist your cure.

HERR LOVER.—In such a case the patient should wear warm woollen underclothing, and avoid chills. The Scott's Cod Oil Emulsion should be taken after food regularly, and Stern's Pumiline Essence should be used at bedtime, a little being added to hot water and the vapour inhaled. If the cough is very troublesome, use the following mixture: Chlorodyne, one drachm; ipecacuanha wine, one drachm; syrup of squills, one drachm; glycerine, to make up two ounces. Label: "A tablespoonful in a little water occasionally."

A. T. CLARK.—The idea you name is not correct. You only suffer from some local irritation, and your chest pain is only of muscular origin. Apply a little Vinolia at night to your lips, and clothe warmly. A hot salt-bath at bedtime occasionally will do you good. If you wish the state of your chest reported upon, you must undergo an examination by a physician.

AFFLICTED.—Attend to Rule 4 for Correspondents, if you wish a surgeon's address; but any of the surgeons attached to the Royal Infirmary of your city would be able to advise you fully. The operation—supposing it is required at all—is not a serious one. Try wearing a suspensory bandage and bathing the parts with Hazeline and cold water morning and night.

SALTERLEE SHIBDEN.—A glass of stout taken at dinner and at supper will do you no harm probably. As regards the other symptoms you name, we should think they will disappear in time of themselves. If the faintness is persistent in such a case, take a dessertspoonful of brandy, plain or diluted.

W. M. C.—1. We are pleased to find that our recommendation had such a good effect. You must judge for yourself regarding the advisability of continuing your tobacco at all. Make the experi-

ment, and note the result. If you feel that you enjoy better health without tobacco, certainly give it up. 2. Inman's Hypophosphites certainly; but neither this, nor any other tonic, must be used continuously.

STELLA.—1. Revalenta is an excellent food. 2. It is not advisable in your case, we think, that you should abstain from animal food altogether. 3. Yes.

W. P.—1. Such symptoms are certainly often associated with the presence of worms; but they may also arise from some nervous cause. We advise you to note if there are any signs of worms; failing to discover them, try the effect of taking twenty grains bromide of potash, in water, at bedtime. 2. May arise from many causes—cold, or irregularity in diet, for example. Do not take much animal food for a time, avoid alcohol, drink Vichy Water, and after meals take a teaspoonful of Inman's Syrup of the Hypophosphites, in a wineglass of water, thrice daily.

K. Z.—Wash your head once a fortnight with Vinolia Soap and tepid water; and apply a little plain brilliantine to your hair each morning. Your scalp probably suffers from dryness. Use a soft brush only.

CHARLES NEWFIELD.—Stop your cigarette-smoking at once, and follow advice given to "Alfred G." in last week's HEALTH. Your smoking and inhaling the smoke is at the root of all your troubles. Cycling will do you no harm, provided you pursue it in strict moderation.

GEORGE RIDDELL.—Blushing is not a disease, and therefore there can be no cure required. It is only a habit, which you will outgrow. Mix in society, take plenty of out-door exercise, and keep your mind from thinking about your symptom.

A SCOTCH LASSIE.—You may keep your mind perfectly easy; the symptoms you have read about are not, and could not, be yours. What you suffer from is a very common, and not in any way serious, ailment. Simply bathe the affected parts with tepid water (to which a little Condy's Fluid has been added) morning and night. Internally, after your meals take fifteen drops of Fer Bravais, in water; and let us hear how you are in a week or two. We may add that it is probable the air of your present residence does not agree with you; it may be too relaxing. Think over this latter point, and note if you enjoy better health elsewhere. If you write again, enclose stamped directed envelope.

W. M.—1. All expedients to alter the shape of the nose are simply vanity. Be content with the features nature has given you. 2. Dumb-bell exercises and gymnastics, carefully carried out, will undoubtedly increase the girth of the chest in a healthy person.

DILEMMA.—You infringe our rule regarding writing on one side of the paper only. Our view of your case is that your digestion is simply a little out of order. Take a vegetable dietary—stewed fruits, apples or oranges, &c., and whole-meal bread, with Grant's Oat Flour for supper and breakfast; avoid tea and coffee, and on each alternate morning take twenty drops Cascara Cordial, or two Cascara Tabloids, and sponge with tepid water each morning. The Extract of Senna Pods (advertised in our pages) may be used as a substitute for the Cascara, if the latter does not suffice to produce regularity of digestive action.

A. G. S.—Try the following powder: Powdered rhubarb and powdered calumba, of each, ten grains; aromatic powder, five grains. Mix: and take one such powder at bedtime.

C. GRAVES.—Use a teaspoonful of the following lotion, in a wineglassful of warm water, every morning as a mouth-wash; it will restore firmness to the gums when the teeth are loose: Tannin, one and a half drachms; iodide of potassium, twelve grains; tincture of iodine, one drachm; tincture of myrrh, one drachm; rose water, to six ounces. Directions to the chemist are that he dissolve the tannin and potassium iodide in the rose water. To this add the tinctures, and strain.

OLD MAN.—To give a mustard bath—which should not exceed ten minutes' duration—add sixty grains of mustard to the gallon of water.

AILING.—Read what is said about cases like yours in the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.); you will find full advice therein given.

C. CAMPBELL.—The following may suit your case: Carbonate of magnesia, five grains; powdered white sugar, five grains; powdered borax, four grains. Mix to form a powder. One powder to be taken twice daily, an hour after meals, for acidity.

GIRVAN.—To encourage growth of the moustache you will find the following useful: Liquor ammonia (strong); chloroform and oil of jasmine, of each, half an ounce; castor oil, half a drachm; spirits of rosemary, to make up four ounces. To be kept in a stoppered bottle and labelled: "A little to be rubbed into the hair in the morning." Use, also, a little of an ointment composed of Lanolin, two drachms; and oil of jasmine, half a drachm. Rub this into the parts at night, so as to prepare them for the lotion in the morning.

B. W.—Follow the advice regarding diet, &c., given to "Dilemma" in the present number. You do not send your name, so that we cannot forward you the copy of HEALTH you desire. Forward your name and it shall be sent you.

W.—Probably defective assimilation of food and acidity. Exercise in the open air daily is needful, with a tepid sponge bath each morning. For piles, try the injection of a little Hazeline, pure or diluted with water; and take to dinner a little good claret or Skerryvore Whisky (advertised in our pages) diluted with Vichy Water. The sounds in the ears indicate an excess of wax-secretion. Have the ears syringed by a surgeon. For the tongue and mouth, as a wash after food, use Bunter's Puriline Mouth Wash. If not bettered, write again.

JONIBRO.—1. We should say Bayley's India-Rubber Flesh Brush is the best. 2. Singeing is of no service whatever to the hair. It began in a mistaken idea that the hairs exuded a fluid when cut.

NEVETS.—All the symptoms you name are those of nervous kind. You can only increase the "fatness" of your face by taking nutritious diet, and Scott's Cod Oil Emulsion, after your food, thrice daily. Try fifteen drops of Fer Bravais, after meals, along with the oil.

AEGER.—The advice given to "Wrecked" in HEALTH No. 358 applies to your case. Your brooding over your (fancied) troubles is the cause of your uneasiness. As far as we can judge from your letter, you have absolutely nothing the matter with you; but are evolving troubles out of your mental brooding over your state. Live simply and neglect your symptoms, take a tepid sponge bath each morning, go about your daily work cheerfully, and avoid anatomizing your symptoms and yourself. This is the only course which will cure you. If you desire address of a physician, send stamped addressed envelope. An interview with a sensible medical man may relieve your mind.

G. E. S.—1. Give the child Mellin's Food only. That you are using is of starchy nature. 2. Horsford's Acid Phosphate as a tonic certainly. 3. Apply to the makers. 4. There is no certainty; but Twyford's "Unitas" Closet is the perfection of a cleanly and simple sanitary apparatus.

ALFRED GRUBB.—"Sanitas" Fluid should be used as a disinfectant for the bed and body-clothes of the patient. The body should be sponged with Sanitas suitably diluted. Use also this fluid and Sanitas Soap for washing the woodwork, after fumigation with sulphur.

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Proprietor: ALFRED WILSON, 422, Clapham-road, London, S.W.

COMO. — Adopt the advice given to "Dilemma" in the present number. The Extract of Senna Pods (advertised in our pages and prepared by Rankin & Borland, of Kilmarnock, N.B.) should be used by you to initiate regular action of the bowels; while your diet should continue the good effect of the drug. Read HEALTH No. 285 (to be had from the Publisher, price 2½d.) regarding the use of glycerine for constipation.

E. A. PHILLIPS.—See advice given to "Separens" in No. 358 HEALTH.

H. P.—What you name need cause you no anxiety. We recommend you, first of all, to take Inman's Syrup of the Hypophosphites for a time (as a tonic), as ordered to "W. P." in the present number, and to try a tepid sponge bath each morning. Pulvermacher's Belts (194, Regent-street, London, W.) would also be likely to do a case like yours much good. Write to Mr. Pulvermacher direct, and detail your symptoms to him. If not cured, write again by all means.

ANXIOUS.—The case you name appears to us one in which an examination by a physician is alone calculated to be of service. There is evident irregularity of functions present, and this indicates that there are conditions existent such as only the careful examination of the patient by a medical man is likely to detect and remedy. If you have already consulted a physician, why not make him acquainted fully with what you have told us? We may add that, in our opinion, the case is one for the use of tepid or warm internal douches, and for rest along with treatment such as will correct the irregularities you name. If you wish to consult an Edinburgh authority, we shall be glad to forward you name of such, if you send a stamped addressed envelope. This is your only satisfactory remedy, and will save much pain and suffering.

A. G. S. E.—1. Apply to the Medical Battery Co., 52, Oxford-street, London, W., and you will be supplied with details. 2. We do not know the exact number, but we should say about forty. 3. The first is the best.

A. CATHIE.—Stern's Pumiline Remedies (see advertisement in our pages) should be regularly used by you until your chest ailment is better. See advice given to "Old Man" in the present number.

PATTY—A hair-wash which is not greasy in its nature may be made as follows: Glycerine, four ounces; tinct. cantharides, four drachms; liquor ammonia, four drachms; rose water, concd., two ounces; bay rum, ten ounces.

A. TAYLOR.—Read the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.).

S. B. G. — Try a vegetable dietary — stewed fruits, apples or oranges, &c., and whole-meal bread, with Scott's Midlothian Oat Flour for supper and breakfast; avoid tea and coffee; take Cascara Cordial, twenty drops in water, or a Tabloid, between meals, once or twice daily. The Extract of Senna Pods, made by Rankin & Borland, Kilmarnock, may be found extremely useful as an effective, but mild, aperient.

P. HAIG.—Try the following pill: Extract of aloes; eighteen grains; sulphate of quinine, twelve grains; pil. hydrargyri, six grains; extract of rhubarb, eighteen grains. Mix, and make into twelve pills; one to be taken daily about midday.

GLECK.—The following may be used in cases of falling hair, by way of stimulating hair-growth: Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once a week or ten days, at night, with Vinolia Soap and tepid water. Keep the hair short for a time.

MARY F.—When the itching is present, apply a little of the following lotion to the parts twice or thrice daily, after bathing with tepid water, in which a little bicarbonate of soda has been dissolved: Borax, two drachms; hydrochlorate of morphia, five grains; glycerine, half an ounce; rose water, four ounces. Mix. Label: "For outward use only."

KINGSFORD.—To unite iron with cod oil, the following is a method: Syrup of the iodide of iron, three drachms; mucilage of acacia, one ounce; cod liver oil to make up six ounces. Mix. A dessertspoonful may be given after food, twice or thrice daily.

S. STREET.—Read the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the rules it gives for cases like yours.

M. R.—Go to a physician and undergo a thorough examination. This is the only satisfactory method of obtaining a reliable opinion regarding the matter you write about. We can send you address of a physician, if required, on receipt of stamped addressed envelope.

SAM G. — For your skin-affection you should try Vinolia as an outward application, and wash with Vinolia Soap (Roberts & Co., 76, New Bond-street, London, W.). A course of La Bourboule Mineral Water (Ingram & Royle) will also be found useful. Use the water as directed on the bottle.

R. PRENTICE.—Brush the hair regularly, night and morning, with a soft brush, and rub in a little of the following to the roots each morning: Eau de Cologne, two ounces; tincture of cantharides, two drachms; oil of rosemary and oil of lavender, of each, ten drops. Mix. Label: "The Hair Lotion."

GIFFIN.—Read the article in HEALTH, No. 199 (to be had from the Publisher, post free, for 4½d.), and read the article on acne and how to cure it. This will guide you as to the treatment of your ailment; and take internally fifteen drops Fer Bravais, after food, in water, twice daily.

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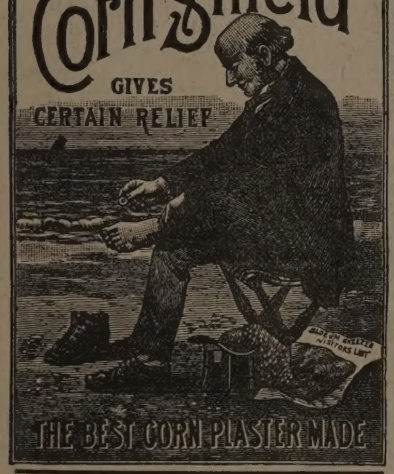

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